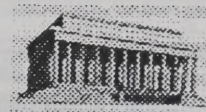


The Capitol Hill Monitor



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FIRE BUFF RADIO NOTIFICATION SYSTEMS

by Jon Binstock

Yes, we all need a vacation from our daily activities. While for most of us it can be a relaxing hiatus, some might still like to keep up with public safety happenings. Plus, it's always nice to say hello, swap notable incidents and increase our circle of fire buff friends. Therefore, below is a listing of out-of-town fire buff radio frequencies. The groups listed welcome visitors and encourage them to communicate on their systems. Make certain your group has a reciprocal agreement with the system(s) you wish to use before transmitting.

Wash. DC, MD and No. Va

Breaking News Network

453.000 82.5 Primary
453.000 97.4 Alternate

Citywide Radio

452.975 103.5 Primary
452.975 167.9 Alternate

Connecticut

Citywide Radio Network

463.775 167.9 Avon
463.550 167.9 Hartford Primary
464.900 162.2 Meriden
464.750 225.7 Montville 1, Primary
464.000 71.9 Montville 2, Sec.
464.975 167.9 Newington
462.000 173.8 Willimantic

Hartford Metro Radio System

462.725 167.9

Maine

Southern Maine Notification Association (York)

464.850 173.8

Massachusetts

Central Radio System (Fitchburg)

463.825 103.5
462.575 103.5 Simplex
461.550 103.5 Winchendon

Citywide Fire Radio of Boston

463.550 167.9 Boston Area
461.375 167.9 Citywide North
464.275 167.9 NewsComm

Metro Radio System

462.725 167.9 Boston
462.650 123.0 South Boston
464.300 203.5 North of Boston "N1"
464.950 94.8 Farther North "N2"
462.575 162.2 South of Boston
461.950 103.5 South Bridge

Note, when in the area call 617-527-2605 and leave your name, organization and unit designation. You may then use the system.

New Hampshire

NH Statewide Notification Association (Peterborough)

461.400 118.8 Dispatch "S1"
462.125 118.8 Personal "S2"

Note, 462.125 also covers south NH and eastern Massachusetts.

New Jersey

New Jersey Countywide

463.475 118.8
461.600 167.9
461.950 151.4
464.400 118.8 Simplex

Metro Fire NJ

463.250 85.4
461.500 114.8
464.600 85.4
452.175 114.8

New York

Citywide New York

461.650 167.9 Primary
461.325 167.9 Secondary

New York Central Radio

464.175 167.9
462.100 141.3

Pennsylvania

Philadelphia Fire Films

462.000 123.0

As of this writing the groups listed here are active. But notification systems frequently appear and disappear at the spur of the moment. Vito Maggiolo (Citywide Radio, DC); Dan Soifer and Rick Nadeau (Hartford Citywide Radio Association); Julian Olansky (Metro Radio System, Boston) and Norman Woods, Jr. (NH Statewide Notification System) contributed to this article.

NATIONAL, DULLES AIR- PORTS SEEK DIGITAL TRUNKED SYSTEM

Later this month hopeful bidders will be putting the final touches on their proposals to build a digital trunked radio system for the Metropolitan Washington Airports Authority. The authority, which operates Washington National and Washington Dulles International airports, issued an inch-and-a-half-thick request for proposal earlier this summer seeking to replace the existing mobile radio systems at the two

airports with a three-site simulcast 800 MHz digital trunked radio system.

Among other responsibilities, the winning bidder is expected to supply and install base, portable, mobile and desk station radios, antennas, transmission lines, dispatch consoles and voice recorders. The vendor is also supposed to install a supplemental "leaky" coaxial radiating system within certain building areas, similar to what is used in the subway tunnels. Based upon signal strength measurements, at least 14 building areas, seven at each airport, have been identified as areas which probably require such "in-house" antenna systems.

The winner must also supply and install the multiplexing and channel bank equipment necessary to interconnect the authority's three antenna sites at National, Dulles and Tysons Corner.

Directional antennas are planned for each of the authority's three antenna sites. The Tysons Corner site will consist of two pairs of directional antennas. One set of transmit/receive antennas will be directed toward Dulles, and the other, toward National.

The system controller will be installed at National Airport in Hangar 5, which is designated as the system-wide control point. Equipment for receiver voting, equalization and the interface to dispatching consoles will also be housed in Hangar 5.

Radio equipment at Dulles will be installed in an existing shelter adjacent to the rotating beacon on the airport's east side. The Tysons Corner site is at the intersection of the Dulles Airport Access Highway and Virginia Route 7.

The system will have six dispatch consoles, one each for police, fire and operations at both airports. In addition, the system will consist of 476 mobile, 430 portable and 95 general purpose base radio stations.

A digital network will interconnect the three trunking sites to allow for simulcast operation. A digital simulcast system, the RFP states, is desired to take advantage of the features and flexibility which a digital system can offer. The system will employ a four-level digital modulation scheme such as Quadriphase Shift Keying (QPSK), p/4 Differential Quadriphase Shift Keying (p/4-DQPSK), or 4-ary Continuous Phase Modulation. Radios must also be capable of operating in the FM analog mode as well.

The RFP requires coverage within a five-mile radius around each airport and one mile on either side of the Dulles Access Road and Interstate Highway 66 to the George Washington Memorial Parkway.

The trunked system will consist of eight channels, 866.675, 866.925, 867.2, 867.4375, 868.2125, 866.8875, 867.35 and 867.4625. One channel will carry data for the system controller. In addition, the RFP requires that the radios operate on the five national mutual aid channels, 866.0125, 866.5125, 867.0125, 867.5125 and 868.0125, in analog FM.

The RFP tentatively specifies 38 talkgroups, including six for fire & rescue, six for police and five mutual aid channels. The remaining 21 talkgroups will be divided up among engineering, maintenance, utility and various other activities.

The deadline for offer submissions is Sept. 29. After receiving notice to proceed, the authority estimates that it will take 300 days for the winning contractor to complete and fully test the system.



IT NOT ONLY SOUNDS FISHY, IT IS

by Alan Henney

They're out on the bay and along the coast in smelly boats and planes. Some days their radio channels carry non-stop chatter from dawn to dusk. The often controversial menhaden fishing industry hasn't changed much since its inception more than 125 years ago. With the exception of spotting planes and radio, the technique for netting the fish remains the same.

America's largest menhaden operation is based in Virginia's northern neck, 80 miles southeast of Washington, in Reedville. The northern neck is home to Virginia's two menhaden processors, Ampro Fisheries Inc. and the Zapata Haynie Corp.

Their combined fleet includes around 24 mother-ships, typically ranging from 120 to 200 feet in length. Each boat has a captain, a pilot, a mate, two engineers and an eight-man crew. They roam the near-shore waters of the Atlantic Coast between the Carolinas and New England and portions of the Chesapeake Bay in search of menhaden, a fish that isn't edible and isn't sought by recreational fishermen. Each ship has two 40-foot boats aboard and is often accompanied by a spotting plane. When a school of menhaden is located, the smaller boats are lowered over the side and encircle the fish with their net, half carried in each vessel.

When the circle is closed, the bottom is pursed, keeping the fish from escaping. The menhaden, sometimes caught by the hundreds of thousands, are sucked out of the net and into the hold of the mother ship. They are known as purse-seiners because they wrap nets around huge schools of fish and then "purse" or close the bottom of the net to keep the fish from escaping. Single sets with the nets can result in catches of several hundred thousand pounds of fish, most weighing less than a pound.

At the plant, back in Reedville, the fish are cooked and the oil is separated from

the meal. The oil is used in the manufacture of paints, varnishes and even cosmetics. The dried meal becomes a high-protein food supplement for poultry and livestock and is used in the manufacture of fertilizer.

Both companies have been plagued by controversy -- strikes, lay-offs, accusations of racism, charges of over fishing and emitting pungent odors from their processing plants. But this hasn't kept them, or their competition, from hauling in enormous catches.

In 1993 the coastal catch of 500 million tons included 250 million tons from the Virginia portion of the Chesapeake Bay. Menhaden fishing is banned in most rivers and creeks draining into the Chesapeake. Menhaden are considered the bay's most important forage fish -- food for striped bass, bluefish, white perch, red drum, cobia and just about every other game fish.

If you find yourself near the bay or the mid-Atlantic coast, chances are that a menhaden crew isn't far away. Frequencies used by both companies appear below. On paper, Ampro Fisheries and Zapata Haynie appear to be separate entities. But on the water they are a seamless operation. Both companies appear to use similar radios, which occasionally employ encryption; share spotting planes; and communicate on either set of frequencies as desired.

So the spotting planes know exactly who they are instructing, each team often uses a separate channel. Some days as many as five channels are simultaneously active. The planes rapidly switch among the channels to keep each team busy. The fishing boats are also equipped with VHF marine radios and Bell Atlantic cellular phones.

Spotting planes in the Delmarva area from other companies frequently use 122.75, 151.625, 156.05, 156.4, 156.95, among other frequencies.



122.925	[None]	Spotting Plane to Spotting Plane
153.050	[179.9]	Ampro Fisheries Inc CH3
153.200	[179.9]	Ampro Fisheries Inc CH1
153.305	[179.9]	Ampro Fisheries Inc CH2
153.380	[???.]	Zapata Haynie Corp
154.570	[???.]	Ampro Fisheries Inc
158.280	[156.7]	Zapata Haynie Corp CH6?
158.310	[156.7]	Zapata Haynie Corp CH8?
158.430	[156.7]	Zapata Haynie Corp

FAIRFAX COUNTY FIRE DIS-CONTINUES SIMULCAST

Just in case you haven't noticed, Fairfax County fire channel 6, 460.125, no longer simulcasts fire channel 1, 460.575. Fairfax fire will reportedly once again use the repeater as a tactical channel for incidents along the Potomac River as well as in the low-lying McLean and Arlington areas. The site for 460.125 is on TV channel 14's tower in Northwest.

STAFFORD FIRE CHANGES CHANNEL PLAN, AGAIN

Kurt Sokolowski sends along the current channel plans for Stafford County fire and sheriff. For several years the county has continued to experience interference on its UHF-T band channels which have contributed to several frequency changes, the most recent being the addition of a new frequency for fire channel 3. All CTCSS tones are 156.7 with the exception of 154.175 which is 192.8.

Fire & Rescue

154.1750 Simulcasts UHF Dispatch
489.5625 CH1r/4s Fireground
488.6375 CH2r/5s Dispatch
488.2125 CH3r/6s Fireground

Sheriff

489.8375 CH1r/4s Dispatch
488.8125 CH2r/5s Surveillance and Encryption
489.3125 CH3r/6s Alternate

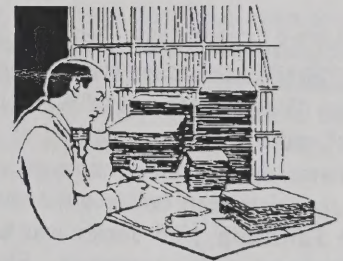
MORE CHANGES FOR OCEAN CITY

The former primary Ocean City police channel, 460.325 [141.3], once again simulcasts the main police trunked system talkgroup. Since Ocean City police reportedly intend to purchase mobile data terminals, the simulcast may be an effort to retain the old frequencies for the MDT system.

Although most lifeguard activity has moved to the trunked system, Ocean City Beach Patrol supervisors continue to use the 155.37 [146.2] repeater in addition to their designated trunked talkgroups.

NEWSSCAN

by Brent Baker



COUNTY-OWNED TRAFFIC PLANE MAKES GOOD.

Rich Bettinger and Gene Donaldson can see it all from 1,000 feet up. Every rush hour, weather permitting, they fly over roads in Montgomery County's traffic Cessna "M-C-10" and alert police and rescue squads to trouble, share information with other traffic planes and feed live video back to the county's traffic center personnel who can adjust traffic signals to ease congestion.

Six years after its inception, reported the July 27 Washington Post, the program remains a unique bird in county government. "They're probably the only jurisdiction that has an airplane up every rush hour," said a Federal Highway Administration official, which gave \$1 million for the county's live video equipment in 1992.

Although the other traffic planes have important tasks, many transportation specialists argue that none is as effective as Montgomery's high-tech Cessna 206, in part because it can get immediate results through the action of employees below.

Montgomery's plane shares the sky each day with about six other traffic planes, carrying radio reporters, and with the Fairfax County police helicopter, which carries video equipment identical to Montgomery's. Montgomery County hopes to eventually add the plane's live video feed to its cable traffic program, rotating it with the still camera views that run now. The annual budget for the program is \$92,000, which includes leasing the plane and the hangar and paying Bettinger hourly fees to pilot the plane. The plane, which identifies on the radio as "M-C-10," commonly operates on 122.75 with other traffic planes and on 150.995 with the county's traffic center.

LISTENERS CONFUSE DRILL FOR REAL THING. In a scenario reminiscent of Orson Welles' infamous "War of the Worlds" radio broadcast, dozens of residents listening to police scanners a few weeks ago mistakenly believed the town of Howell Township, New Jersey was under siege by bomb-toting terrorists. Shortly after dawn, reported the Asbury Park Press, word went out on police and fire radios that workers at the Manasquan Reservoir -- the water source for many local residents -- discovered a drum full of chemicals and an explosive device submerged in the reservoir.

The drum was actually full of water and the device was not explosive at all. What was occurring at the reservoir was a drill by local, state and federal officials testing their ability to respond to threats to the drinking water supply of Howell and surrounding communities. The township official said the drill was "a hush-hush operation because we wanted to see how prepared we were. Local police officials were told it was a drill because they are low on manpower. But other people involved were not told until later in the day. We wanted to make it realistic." Despite the

unwanted publicity surrounding the event, Howell police and emergency management officials said they believe the exercise was a success.

FIRE BUFFING IN THE ELECTRONIC AGE. An Aug. 11 Washington Post article by Steve Vogel focused on fire buff Chris Oliphant and some of his colleagues from the FireCom paging notification system. Oliphant (better known as "Citywide 97" on 452.975) along with Vito Maggiolo, Jim Horan and Vince Destajo, shared their thoughts regarding fire buffing in the electronic age. "You could be out at dinner and there'd be a major fire five blocks away," Maggiolo said, "and you'd never know it if you didn't have your pager."

According to the Post, more than 300 customers, who include volunteer firefighters, police buffs, media outlets and various business people specializing in repairing or boarding up fire-damaged houses, subscribe to FireCom's services. FireCom's network of about 10 dispatchers, the article said, who like monitoring blazes, work without pay and use their own equipment. Not mentioned in the article was WUSA's overnight photographer, Sheldon Levy, who founded FireCom more than a year ago with Maggiolo.

BUGGING THE POLICE. David Triska has been fooling around with radios for more than four decades, ever since he got an old-fashioned crystal set when he was nine years old. Now, reports Denver's Westword newspaper, his lifelong hobby has landed him in hot water with the Denver Police Department, which claims he crossed the line between radio buff and wiretapper.

Police raided Triska's home and seized radios, cables and other electronic equipment, claiming that Triska had "infiltrated" the department's Ericsson-GE trunked radio system. At the time of publication, Triska was not yet charged with any crime, but court documents and interviews with police claim he violated felony eavesdropping laws. Triska, who

insists that listening to police communications is legal, is furious. "They're the gestapo of Colorado," Triska, 51, says of the Denver police.

A spokesman for the FCC told Westword reporter Arthur Hodges that, in general, listening to unscrambled police transmissions is permitted under federal law. And the owner of a local radio equipment company familiar with Triska's case says the city may have a difficult time showing that Triska committed a criminal act.

Diehard scanner listeners have had to graduate from scanners to more sophisticated trunked radios. But programming the radios to monitor the department's "talk groups" is not easy: It's necessary to have special, expensive software normally available only to owners of trunked system.

The Denver Police Department installed its Ericsson trunked system in 1990. At the time, the department agreed to make 15 talk groups available to tow companies, news agencies and any other owners of trunked radios who wanted to monitor communications. In the interest of security, however, it withheld certain "covert" talk groups, such as those used by narcotics detectives.

David Triska figured out how to program in all the department's talk groups, including those the police decided were off-limits. Triska said it wasn't hard -- most of the equipment he needed he ordered through the mail from Ericsson. He won't say how he got his hands on the software, but he says that, too, was a pretty simple feat.

Colorado's wiretapping law specifically allows monitoring of all police radio communications that are "readily accessible to the general public." It is illegal to intercept "scrambled" transmissions, but the law indicates that any talk that isn't encrypted is fair game for listeners. The question, Denver authorities say, is whether Triska violated the state's "readily accessible" rule.

Triska points out that it's possible to hear any individual police transmission -- even one from a covert talk group -- with a conventional scanner; it's just the complete conversations that are difficult to follow. In his book, that means that all police talk must be considered "readily accessible" and that taking additional steps to track conversations -- like programming a trunked radio yourself -- is entirely within the law.

TRUNKED RADIO MODIFIER FOUND GUILTY. In a ground-breaking case, a federal jury convicted Larry Nathan Gass of illegally modifying trunked radios that were used by his security company and the media to monitor Tulsa police's Motorola trunked radio system. The city allows media outlets and the public to monitor only three of the system's 20 channels. Gass was accused of modifying or ordering the modification of radios that were sold to radio stations KVOO and KRMG and to television station KTUL. The modified radios could pick up most of the Tulsa Police channels.

One of Gass' employees admitted that he used proprietary Motorola Inc. software that he had obtained at a hamfest or at radio shops. The software is restricted to Motorola's internal use.

Following the verdicts on 17 counts, reported the Tulsa World, Gass said, "Whatever it takes and as long as it takes, this definitely will be appealed because we think the people have a right to know what their police are doing." Gass' attorneys argued that the city had no reasonable expectation of privacy on the system, which is not encrypted, and whose frequencies are in the public domain. Anyone with a scanner, legal and available to the public, could pick up the channels.

Gass faces up to 85 years in prison and up to \$4.25 million in fines when sentenced Oct. 18 in U.S. District Court. An ongoing probe may lead to others who have illegally modified radios to monitor almost all the Tulsa police radio channels. Under the department's policy, the general public and media may monitor only three of the

system's 20 channels. Gass' attorneys argued that the radio frequencies the Tulsa radio system uses are public. Scanners, widely available to the public, they said, can pick up the same thing, although less efficiently.

Please address all correspondence to Alan. We encourage readers to submit material and write articles which relate to the hobby. All submissions are subject to editing for both style and content. When submitting material please make certain we have your phone number should we have any questions. We welcome frequency and visitor requests, but please include a SASE.

Alan Henney
6912 Prince George's Avenue
Takoma Park, MD 20912-5414
301-270-2531 (voice)
301-270-5774 (fax)
henney@gwis2.circ.gwu.edu (e-mail)

Newsletter Staff

Alan Henney, General Editor and
Acting Treasurer
Willard Hardman, Executive Editor
Brent Baker, NewsScan Editor
Mike Peyton & Dave Clark, Distribution

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Meeting Coordinators

Maryland & DC:

Mike Peyton, 703.749.7379

Northern Virginia:

Ken Fowler, 703.385.2165

Frequency Forum Computer Bulletin Board

We encourage computer users to log onto Jack Anderson's Frequency Forum computer BBS at 703.207.9622 (8-N-1). Frequency Forum is the official electronic gathering place for readers of the *Capitol Hill Monitor*.

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6912 Prince Georges Avenue
Takoma Park, MD 20912

9 Issues Remaining

IAN BENNEY
6912 PRINCE GEORGES AVE
TAKOMA PARK MD 20912-5411